SIMON FRASER UNIVERSITY
Department of Economics

Econ 842 — Prof. Kasa
International Monetary Economics — Spring 2019

MIDTERM EXAM

Answer the following questions True, False, or Uncertain. Briefly explain your answers. (10 points each).

1. If the foreign exchange market is efficient, exchange rates follow random walks.
2. Increased uncertainty produces current account surpluses.
3. Countries must eventually pay back their foreign debts.
4. Fiscal deficits produce current account deficits.

The following questions are short answer. Briefly explain your answer. Clarity will be rewarded.

5. (30 points). **Exchange Rate Dynamics with Endogenous Monetary Policy**. In class we assumed monetary policy was exogenous. Now suppose the Central bank targets the price level, and does so by raising the nominal interest rate when the price level exceeds a fixed target. As a result, the money supply becomes endogenous. In particular, suppose the Central Bank's policy function is

$$i_t = \lambda(P_t - \bar{P})$$

where $\bar{P}$ is a fixed target price level. The rest of the economy is (almost) the same as before. To simplify, normalize the foreign interest rate and price level to be zero. In this case, Uncovered Interest Parity takes the form,

$$i_t = E_t s_{t+1} - s_t$$

where s_t is the log of the spot exchange rate (defined as the price of foreign currency). Finally, suppose that PPP holds only in the long run, so that (given that P^* is assumed to be zero)

$$P_t = s_t + u_t$$

where u_t is a stationary, autoregressive process that captures temporary deviations from PPP. Assume it follows the process

$$u_t = \rho u_{t-1} + \varepsilon_t \qquad 0 < \rho < 1$$

where ε_t is mean zero i.i.d., and can be interpreted as a domestic price level shock.

(a) Combine the PPP and Uncovered Interest Parity relationships with the Policy Reaction function to derive an exchange rate equation that looks just like the one we had in class:

$$s_t = (1-\beta) f_t + \beta E_t s_{t+1}$$

What is β and f_t now?

(b) Use the given law of motion for u_t to solve the above difference equation.

(c) How does a positive inflation shock affect the exchange rate? Does the exchange rate appreciate or depreciate? Explain intuitively.

6. (30 points). What is the Feldstein-Horioka puzzle? On what evidence is it based. Briefly describe how Ventura (2000) proposes to explain it?